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| Relationship | Diagram | Code | Explanation |
| InheritanceD “is-a” B |  |  class D : public B { … }; | Derived class D is a specialization of the Base class B. D inherits all the members of B except constructors |
| CompositionOwnership, P is “part-of” C |  |  class C { … Private: P p; }; | Composite class C owns, or contains, a part class P. P is created and destroyed with C. The interface of P is visible only to C, not its clients. |
| AggregationOwnership, P is “part-of” A |  |  class A { … Void fun() { P\* ptrP = new P(); … } }; | The Aggregator class A owns a part class P. P is created by a member function of A, and so its lifetime is strictly less than that of A. A is expected to destroy P. |
| UsingReferral: U uses R through a reference |  |  public class U { … public void register(R& r) { // use r } }; | A class U uses instance of class R, to which it holds a reference. R is created by some other entity and a reference to it is passed to some member function of class U. |